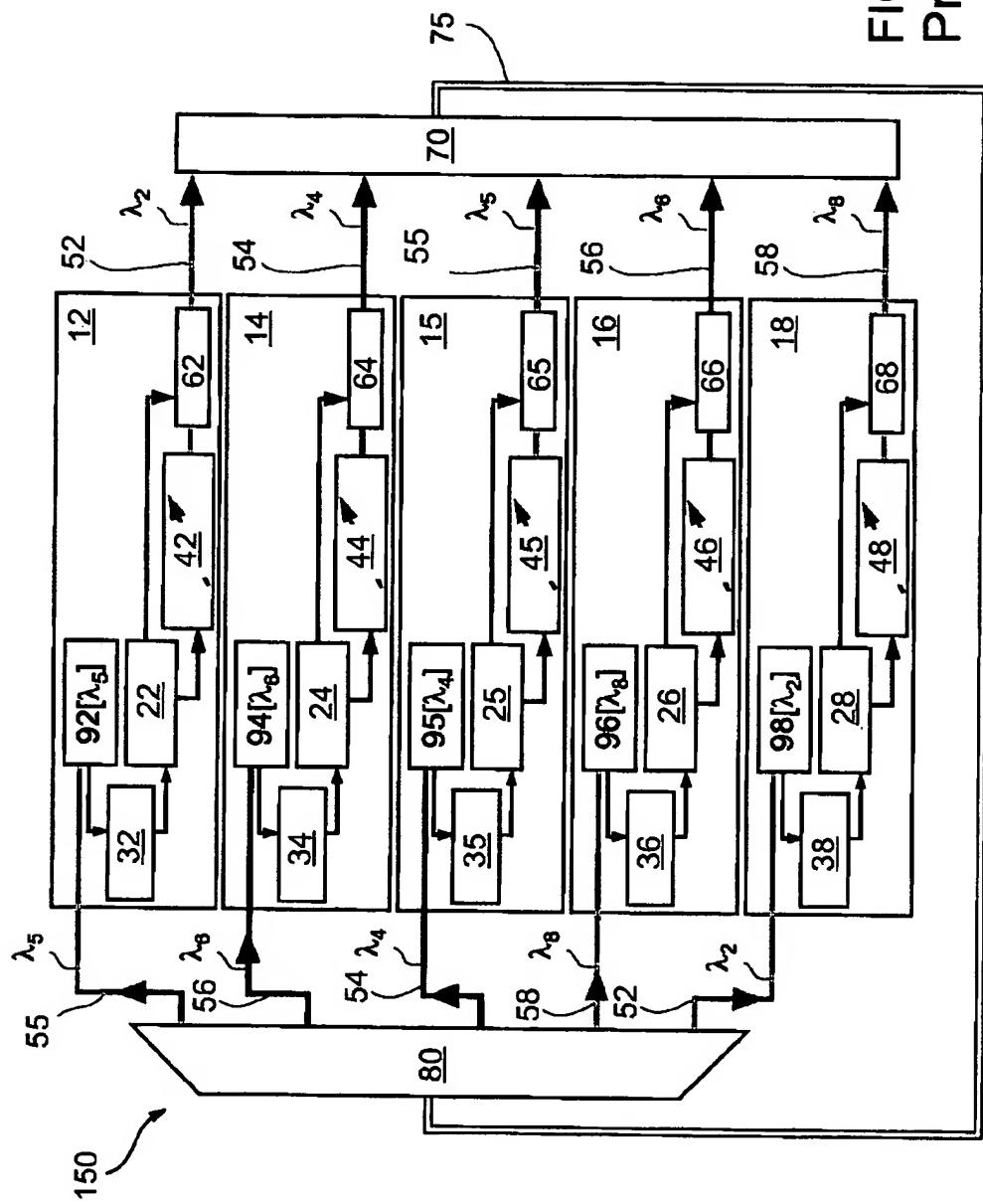


FIG. 1A Prior Art

10 Processing Element	59 Received Data
20 Transmitter	60 Modulator
30 Processing Unit	90 Wavelength Addressed Receiver
40 Tunable Laser	E Electronic Data to be Transmitted
50 Data Packet	λ Wavelength Designation

FIG. 1B
Prior Art



12, 14, 15, 16, 18 Processing Elements (PE)
22, 24, 25, 26, 28 Transmitters
32, 34, 35, 36, 38 Processing Units
42, 44, 45, 46, 48 Tunable Lasers
50 Data Network
52, 54, 55, 56, 58 Data Packets
62, 64, 65, 66, 68 Modulators
70 Optical Coupler
75 Optical Fiber
80 Optical Wavelength Demultiplexer
92, 94, 95, 96, 98 Wavelength Addressed Receiver
Λ Wavelength Designation

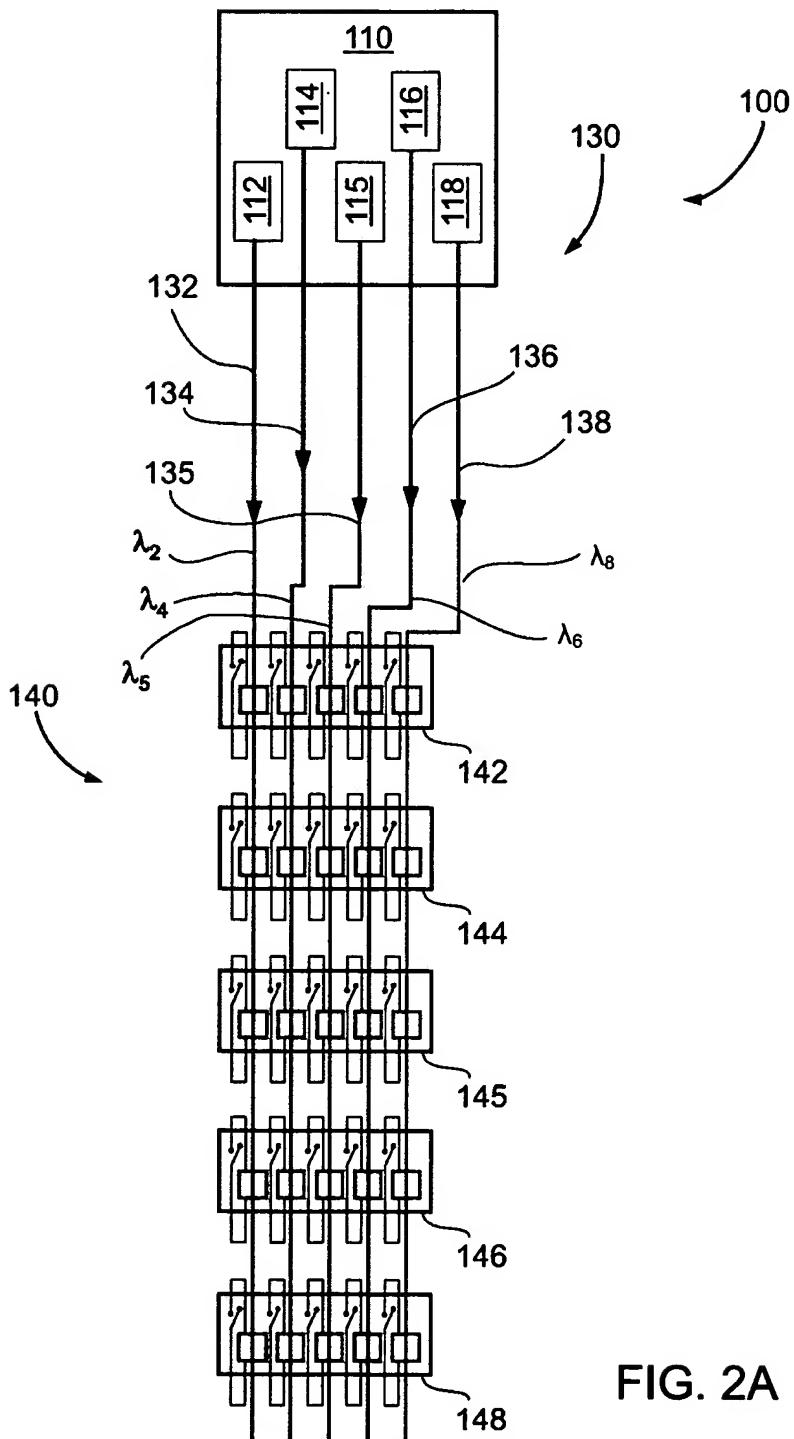


FIG. 2A

100 Laser Power Grid
110 Laser Power Supply
112, 114, 115, 116, 118 Laser Sources
130 Laser Distribution Grid

140 Optical Switching Network
132, 134, 135, 136, 138 Optical Fibers
142, 144, 145, 146, 148 Optical Switch Arrays
 λ Wavelength Designation

Title: LASER POWER GRID

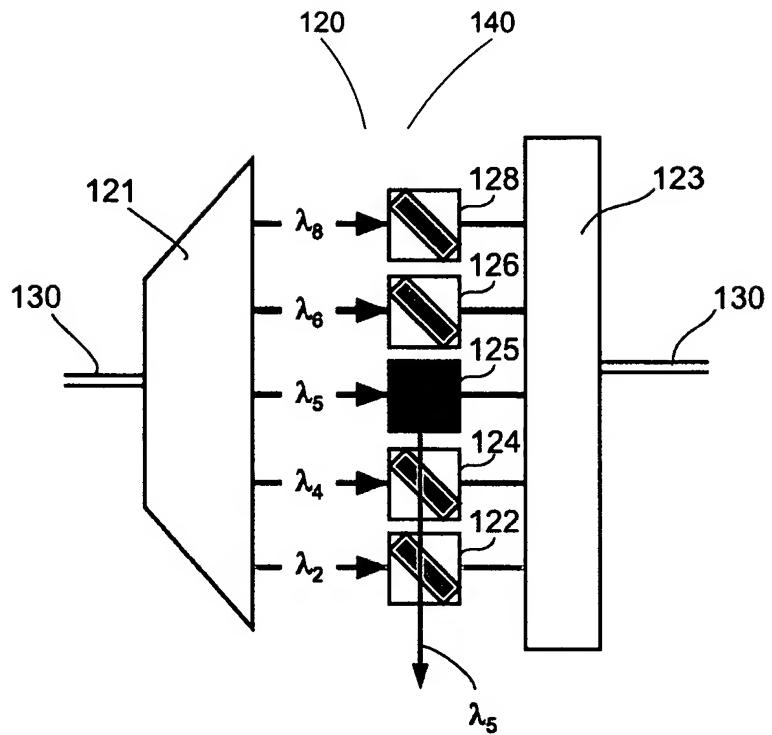


FIG. 2D

- 120 Optical Switch Array
- 121 Optical Wavelength Demultiplexer
- 122, 124, 125, 126, 128 Optical Switches
- 123 Coupler
- 130 Optical Fiber
- 142 Optical Switch Array
- λ Wavelength Designation

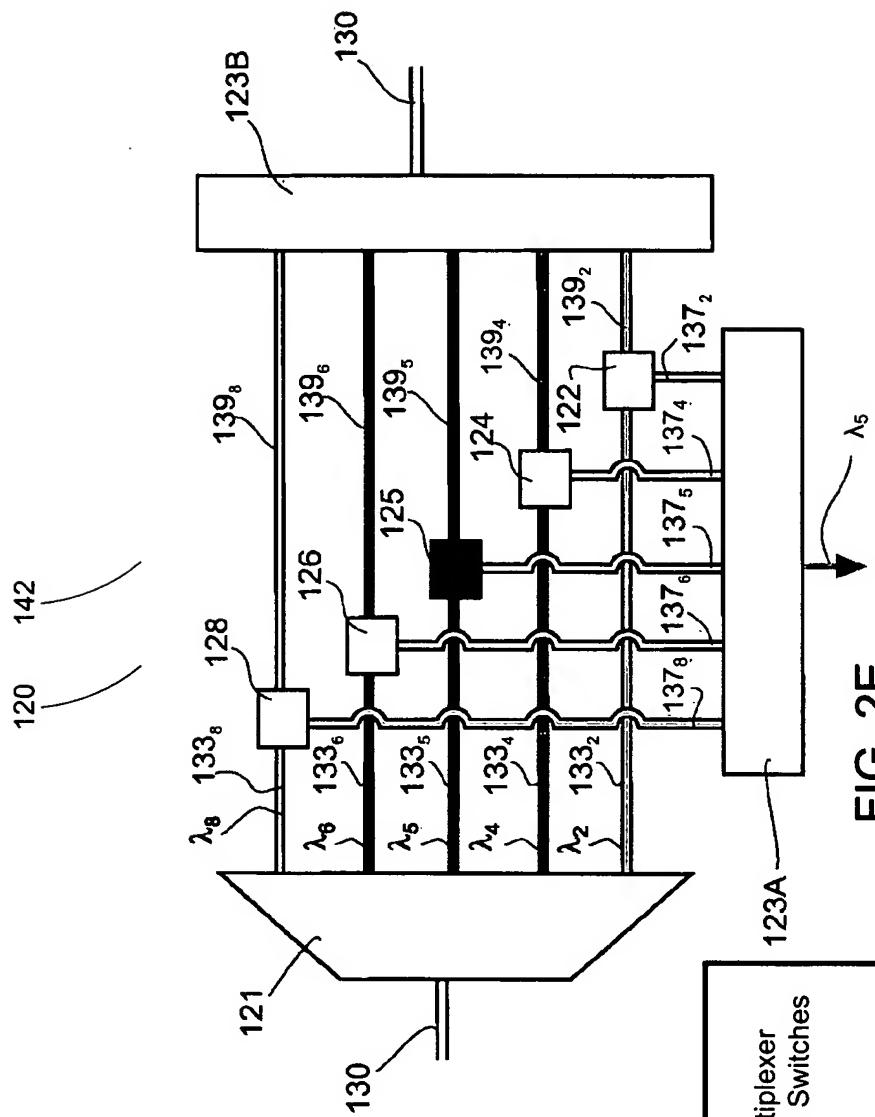


FIG. 2E

120 Optical Switch Array
121 Optical Wavelength Demultiplexer
122, 124, 125, 126, 128 Optical Switches
123A, 123B Optical Couplers
130 Optical Fiber
133 Input Optical Fiber
137 Output Optical Fiber
139 Output Optical Fiber
142 Optical Switch Array
 λ Wavelength Designation

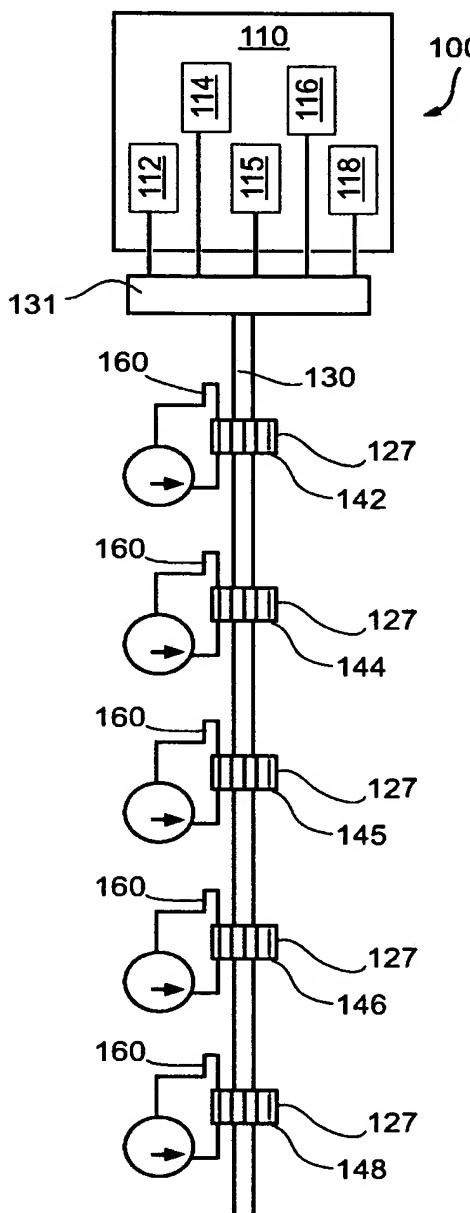


FIG. 2F

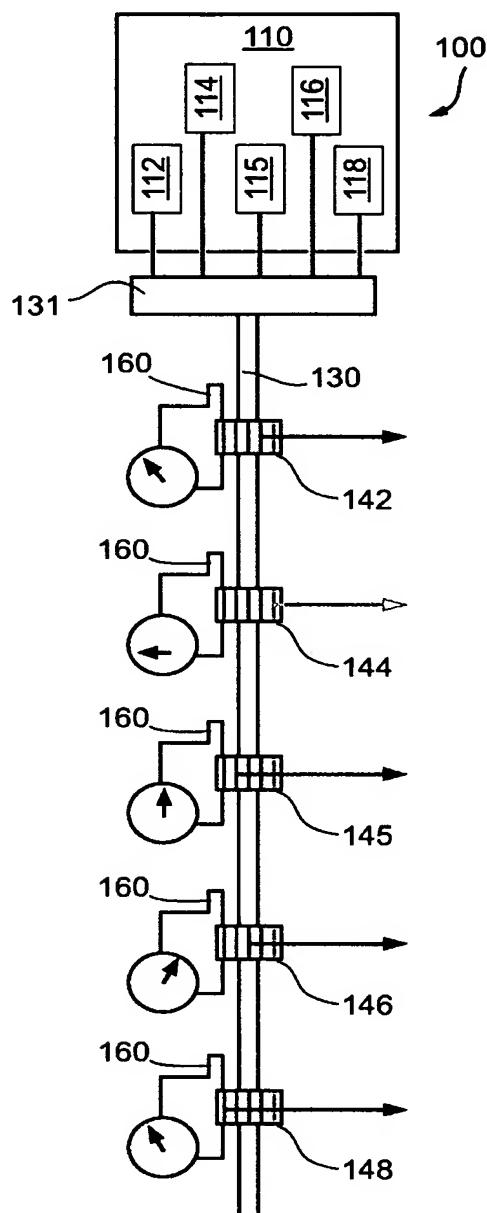


FIG. 2G

110 Laser Power Supply Station
112, 114, 115, 116, 118 Continuous Work (CW) Laser Sources
127 Electrohalographic Switch
130 Optical Fiber
131 Optical Coupler
142, 144, 145, 146, 148 Optical Switches
160 Variable Electric Source
 λ Wavelength Designation

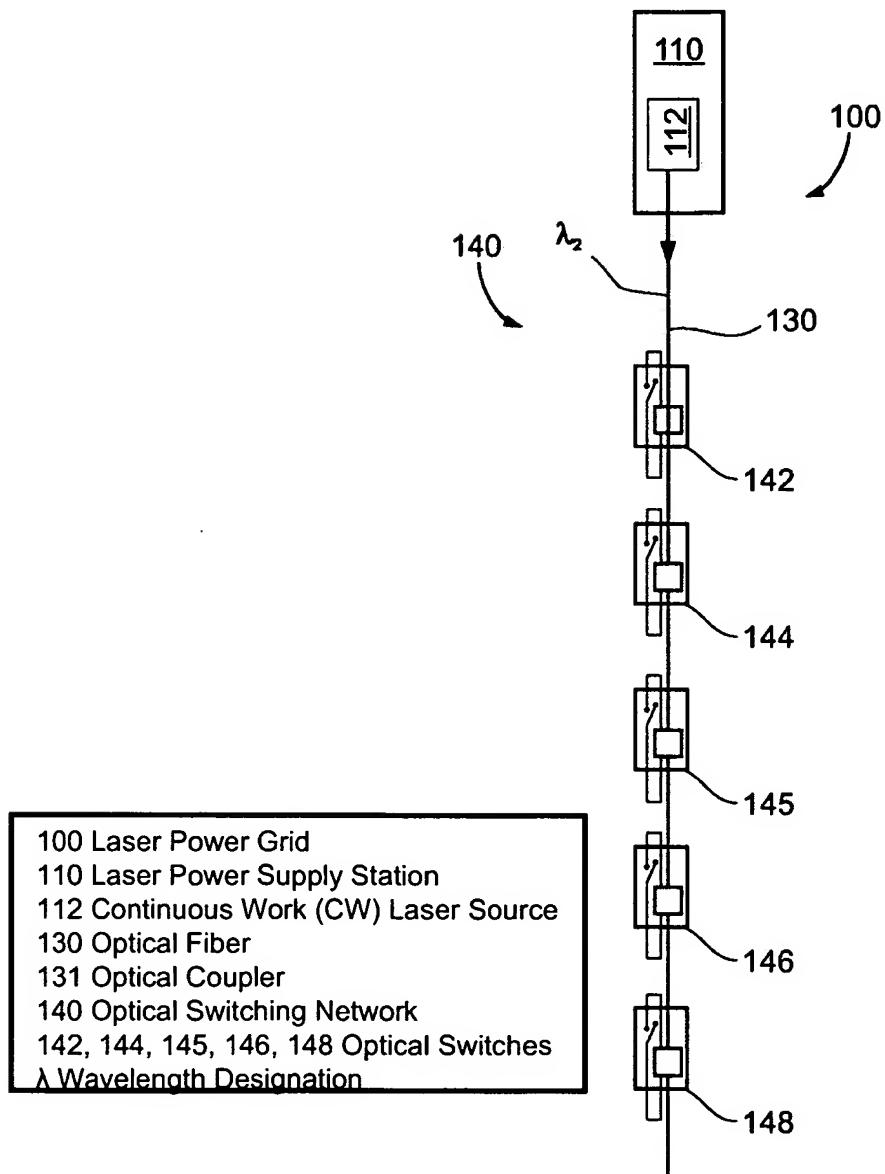


FIG. 2H

Title: LASER POWER GRID

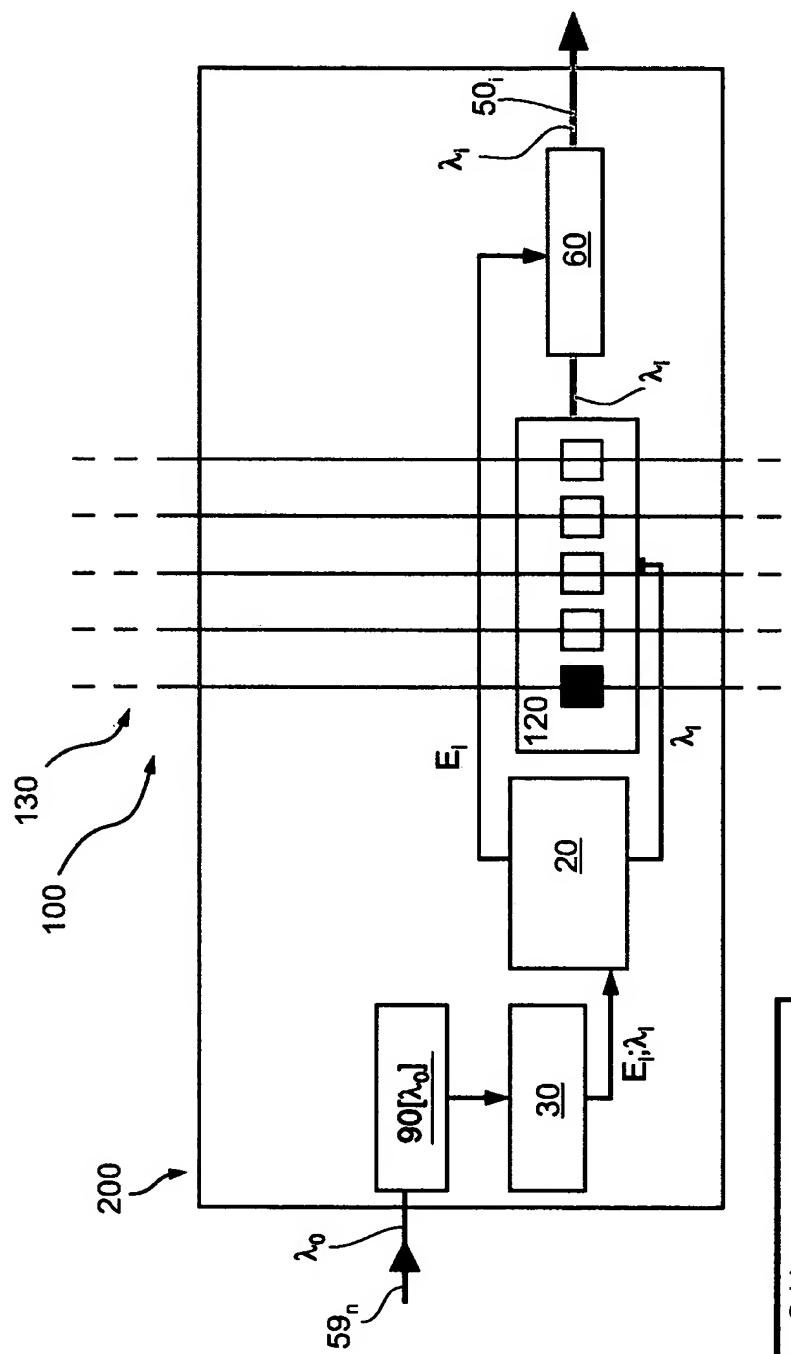


FIG. 3A

100	Laser Power Grid
20	Transmitter
30	Processing Unit
50	Data Packet
59	Received Data
90	Wavelength Addressed Receiver
120	Optical Switch Array
130	Optical Fiber
200	Processing Element (PE)
E	Electronic Data to be Transmitted
λ	Wavelength Designation

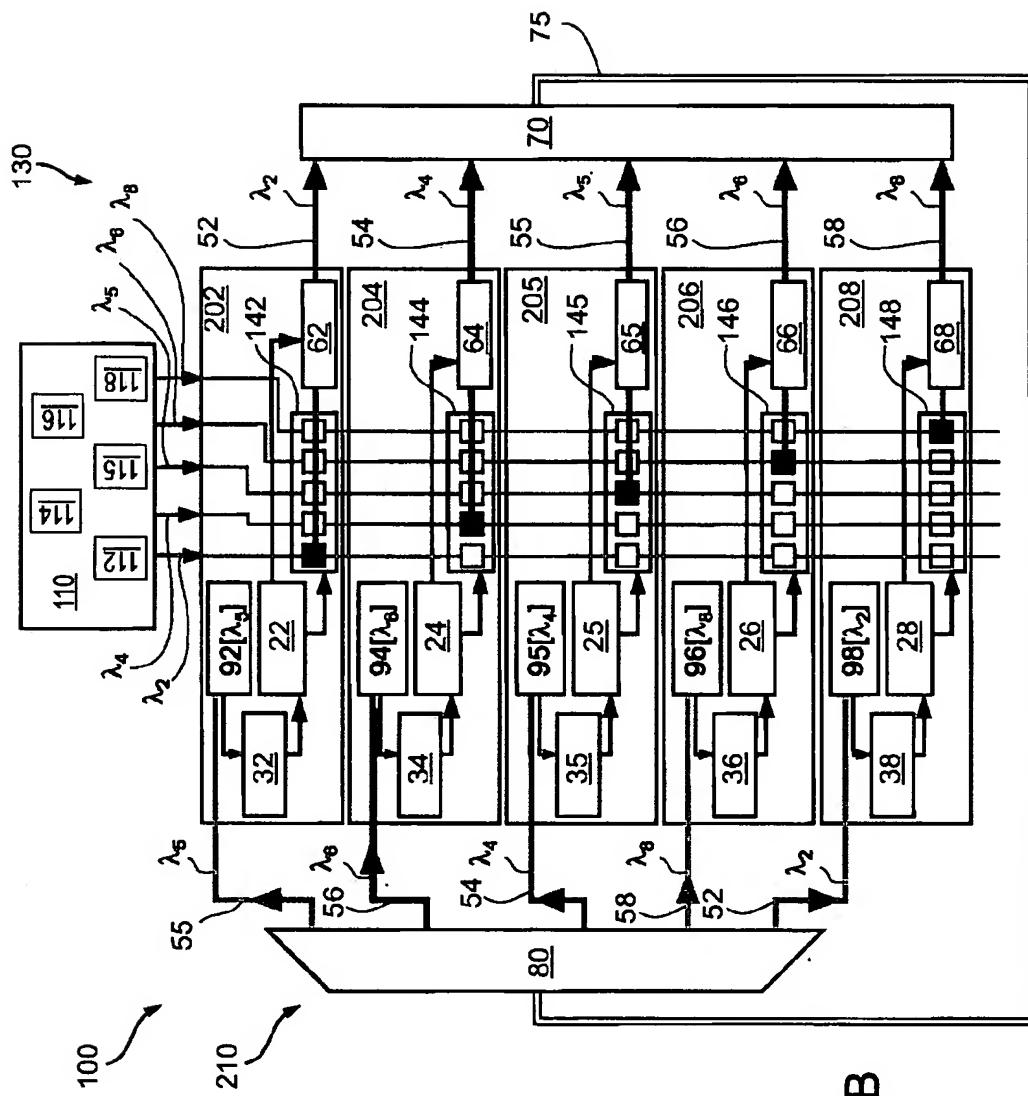
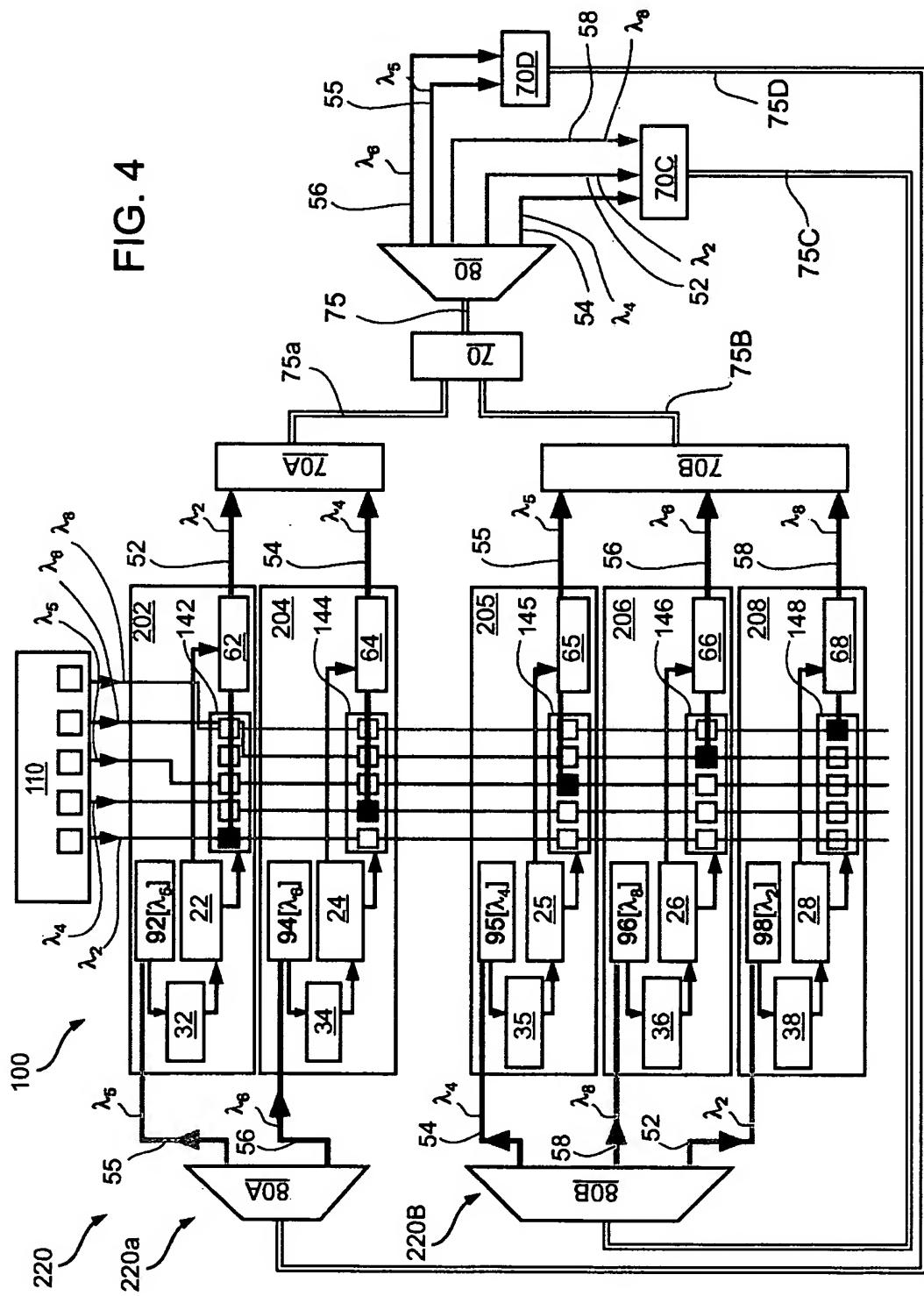


FIG. 3B

22, 24, 25, 26, 28 Transmitters
32, 34, 35, 36, 38 Processing Units
52, 54, 55, 56, 58 Data Packets
62, 64, 65, 66, 68 Modulators
70 Optical Coupler
75 Optical Fiber
80 Optical Wavelength Demultiplexer
92, 94, 95, 96, 98 Wavelength Addressed Receivers
100 Data Network
100 Laser Power Grid
110 Laser Power Supply Station
112, 114, 115, 116, 118 CW Laser Sources
130 Laser Distribution Grid
142, 144, 145, 146, 148 Optical Switch Arrays
202, 204, 205, 206, 208 Processing Elements
210 Data Network
λ Wavelength Designation

FIG. 4



- 22, 24, 25, 26, 28 Transmitters
- 32, 34, 35, 36, 38 Processing Units
- 52, 54, 55, 56, 58 Data Packets
- 62, 64, 65, 66, 68 Modulators
- 70, 70A, 70B, 70C, 70D Optical Coupler
- 75, 75A, 75B, 75C, 75D Optical Fibers
- 80, 80A, 80B Optical Wavelength Demultiplexer
- 92, 94, 95, 96, 98 Wavelength Addressed Receivers
- 100 Laser Power Grid
- 110 Laser Power Supply Station
- 112, 114, 115, 116, 118 CW Laser Sources
- 130 Laser Distribution Grid
- 142, 144, 145, 146, 148 Optical Switch Arrays
- 202, 204, 205, 206, 208 Processing Elements
- 220 Data Network
- 220A, 220B Preferred Locations
- λ Wavelength Designation

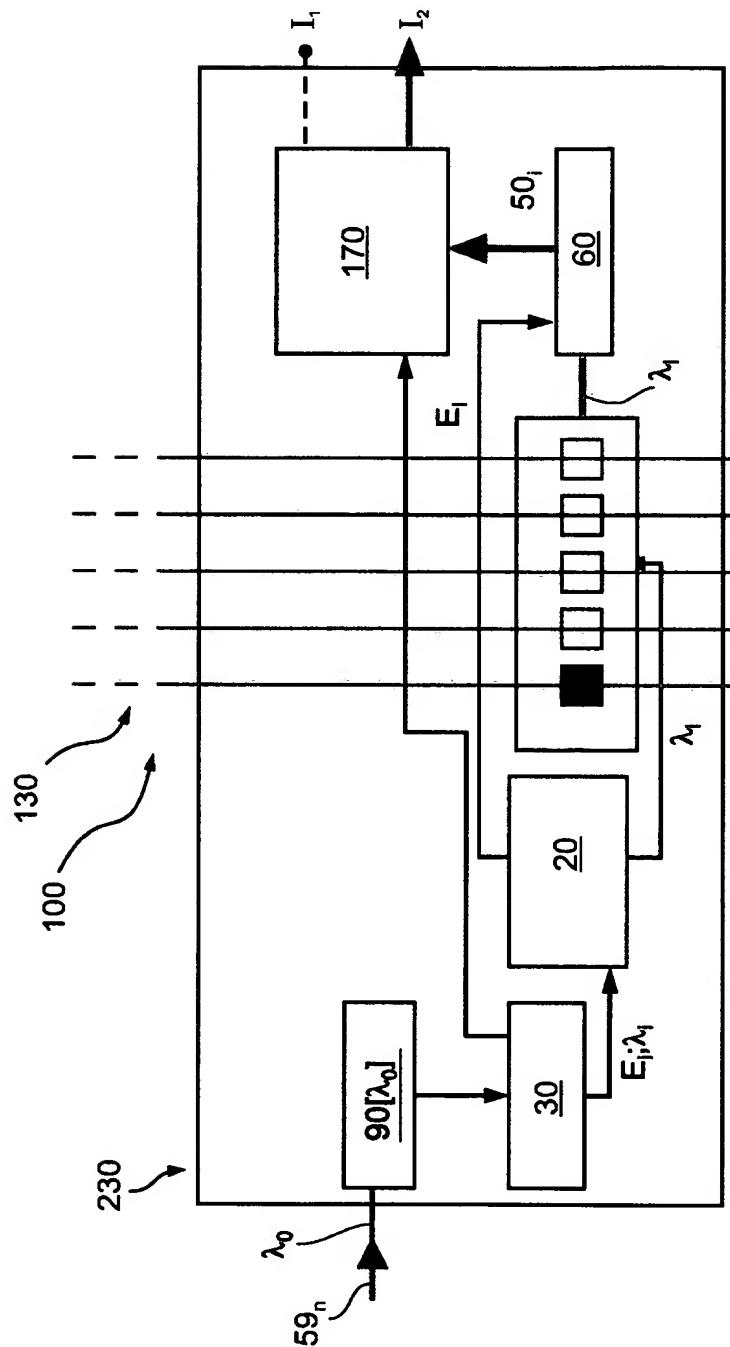


FIG. 5A

20 Transmitter	130 Laser Distribution Grid
30 Processing Unit	170 Cluster Router
50 Data Packet	230 Processing Element
59 Received Data	E Electronic Data to be Transmitted
60 Modulator	I Destination Cluster
90 Wavelength Addressed Receiver	λ Wavelength Designation
100 Laser Power Grid	

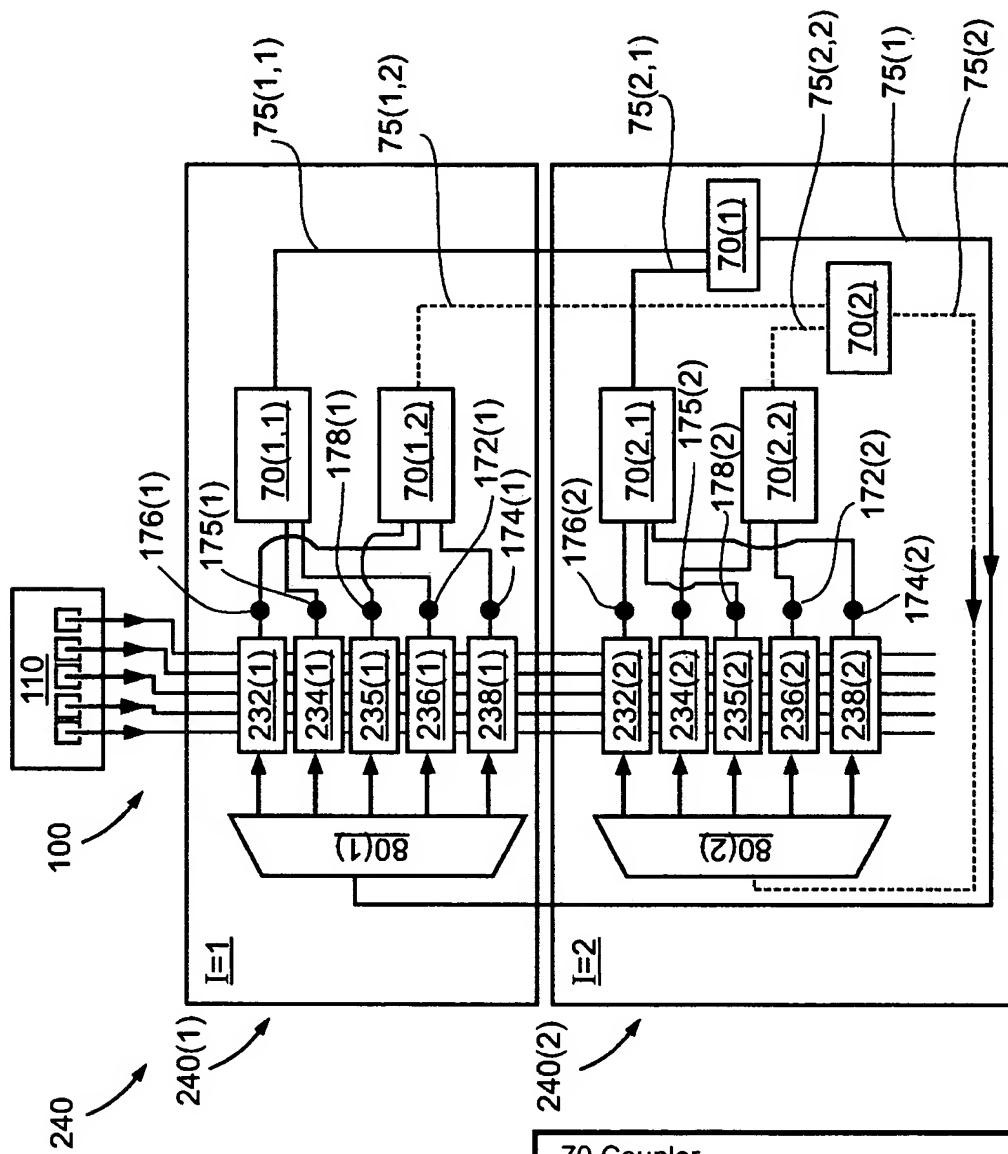


FIG. 5B

70 Coupler
75 Optical Fiber
100 Laser Power Grid
110 Laser Power Supply
172, 174, 175, 176, 178 Data Packets
232, 234, 235, 236, 238 Processing Elements
240, 240(1), 240(2) Clusters
I Cluster ID